V.Everything

Getting Started Guide

COURIER

US Robotics®

The Intelligent Choice in Information Access

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Chapter 1
Introduction

How to Use this Guide

Use this Getting Started Guide to obtain the information you need to get your Courier™ V.Everything® modem installed, configured, and running correctly.

For more information about advanced commands, view the Courier V.Everything Command Reference, which is on the *Connections* CD-ROM.

Contacting U.S. Robotics

If you have questions about your Courier V.Everything, please contact U.S. Robotics.

To do this	Contact
Contact U.S. Robotics Technical Support	1.800.231.8770
Use the Fax-on-Demand service	1.800.762.6163
Download updated Courier V.Everything x2 software from the U.S. Robotics Bulletin Board System	847.982.5092
Download updated Courier V.Everything code	http://totalservice.usr.com
Visit the U.S. Robotics web site	http://www.usr.com
Visit U.S. Robotics on Compuserve	GO USROBOTICS
Visit U.S. Robotics on America Online	Keyword: USROBOTICS

x2 56-kbps Connectivity

If you have enabled x2, your Courier can connect at speeds up to 56 kbps. While line conditions may not always allow for 56 kbps connections, the new Courier software allows you to achieve the fastest analog speeds available.

Adaptive Speed Leveling to Adjust to Line Conditions

Adaptive Speed Leveling® (ASL) allows your Courier to monitor line conditions while connected, and fall back to the next lower speed if conditions are poor. Couriers also detect improved line conditions and shift upward to the next higher speed. The transmit and receive channels adapt independently, each detecting and adjusting to line conditions.

Caller ID Support

If you subscribe to Caller ID, your Courier can interpret and display Caller ID information.

Calls to and from Modems and Fax Machines

When used with fax-capable communications software, your Courier auto-detects and responds to calls from modems and Group III fax machines using EIA-standard Class 1 or 2.0 fax software.

Carrier Loss Redial

If you enable the Carrier Loss Redial feature, your Courier will automatically redial the last number it dialed if carrier is lost (for example, if there is trouble on the line or if the remote modem hangs up). This feature is useful for dialed-line connections that operate unattended.

Dedicated and Leased-Line Support

You do not need to connect your Courier to the public switched telephone network. You can connect a standard telephone cable between your Courier and another modem and make connections without even dialing. You can also connect your Courier to a line that you lease from the telephone company.

Dial Security to Control Access to Your System

The Courier's Dial Security feature allows you to control access at a modem-to-modem level instead of using software that runs on the host computer. With Dial Security, you can prevent unauthorized access to a system through the use of password prompting and dial-back.

Distinctive Ring Support

If you subscribe to Distinctive Ring through your local telephone company, your Courier can be set to recognize and respond to any of four distinctive ring patterns.

Flash ROM Upgradability

Courier modems are software-upgradable using XMODEM file transfers and U.S. Robotics Software Download (SDL) application, allowing you quick, easy access to updates of your Courier's technology. The latest upgrades can be obtained on the U.S. Robotics web site or Bulletin Board System.

Plug and Play Support for Windows 95

The software for the external and internal Courier has been developed to support Plug and Play (as defined by the Plug and Play External and Internal COM Device Specification, Version 1.00). When you connect your Courier to a computer that uses a Plug and Play operating system, the computer automatically detects and configure itself to the support your Courier.

Remote Configuration and Diagnostics

You can remotely configure and test your Courier. If you are a network administrator supporting remote users, this feature can save you time and money.

Selective Reject to Improve Performance on Noisy Lines

Selective Reject is an optional part of the ITU-T V.42 (LAPM) standard. This feature improves performance on noisy lines by reducing the amount of overhead incurred when the protocol must resend data due to errors.

When Selective Reject is active, only the frame that contained the error is resent, instead of the frame plus all of the following unacknowledged frames.

Synchronous Support for Mainframe Computers

The Courier can connect to synchronous serial ports to allow access to mini computers and mainframe computers.

Testing

ITU-T V.54 loopback testing is available. The Courier can perform analog, digital, and remote digital loopback tests to determine if there are problems with the phone line, the remote device, or your Courier's transmitter or receiver.

V.Everything

The Courier provides full support of the x2 (if enabled), V.34+, V.34 standard, V.Fast Class, V.32 *terbo*, and many other modulation schemes, spanning the range of speeds between
300 bps and 56 kbps. We call this unique combination of abilities V.Everything.

Chapter 2
Installing Your Internal Courier

This chapter explains how to:

- Configure jumpers (if your Courier is not being used with Windows 95)
- Insert the internal Courier into your computer
- Connect the cables

What You Need

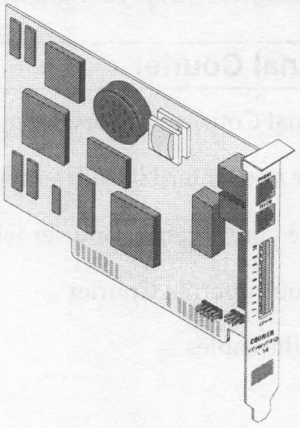


Figure 2.1 The Courier V.Everything Internal Modem

You need the following to install your internal Courier V.Everything:

- Computer with a free interface card slot
- Analog telephone line
- Communications software

Warning: The Courier requires a standard, analog telephone line. Do not connect your Courier to a digital telephone line. Digital lines are commonly used in office buildings and hotels. If you are unsure whether your line is analog or digital, ask your network administrator or your local telephone company.

Package Contents

Your Courier V.Everything package contains the following items:

- The Courier V.Everything modem
- Telephone cable
- Quick Reference card
- Customer Support card
- This *Getting Started* manual
- The *Connections* CD-ROM, which contains:
  - Courier V.Everything *Command Reference Guide*
  - RapidComm communications software and manuals
  - Stampede Remote Office Gold software and manuals
  - Special offers
  - Updated Courier V.Everything INF file

Installing Your Internal Courier

To install your internal Courier V.Everything, do the following:

Step One: Configure your internal Courier with jumpers

Step Two: Configure your internal Courier with DIP switches

Step Three: Insert your internal Courier

Step Four: Connect the cables

Step One: Configuring with Jumpers

Your Courier V.Everything comes configured for Plug and Play, which allows Windows 95 to automatically configure itself to work with the Courier V.Everything.

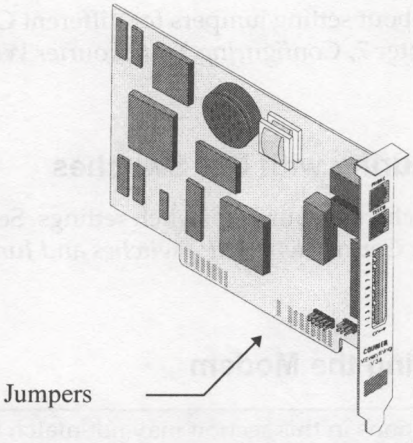


Figure 2.2 Jumpers

Windows 95 Users

Users of Windows 95 should not need to change jumper settings, because Windows 95 automatically detects and configures your Courier.

If you install your Courier, start Windows 95, and Windows 95 does not automatically detect your Courier, you may need to change the jumper settings. For information about setting jumpers, see Chapter 7, *Configuring Your Courier With DIP Switches and Jumpers.*

Other IBM-PC Compatible Operating Systems

If you are using an IBM-PC compatible operating system, you may need to change the jumper settings to a COM port or IRQ setting that is not already used by your system.

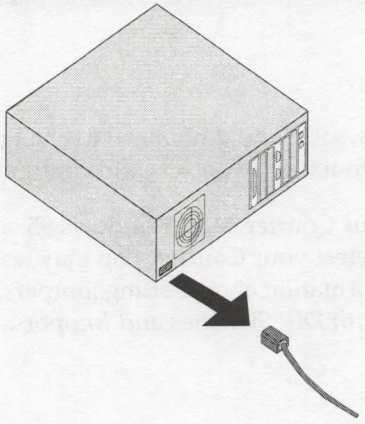
For information about setting jumpers for different COM ports and IRQ settings, see Chapter 7, *Configuring Your Courier With DIP Switches and Jumpers.*

Step Two : Configuring with DIP Switches

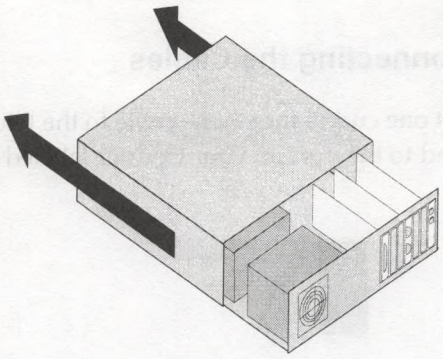
You may need to change your DIP switch settings. See Chapter 7, *Configuring Your Courier with DIP Switches and Jumpers,* for more information.

Step Three: Inserting the Modem

Note: The illustrations in this section may not match the appearance of your computer. For more detail, refer to your computer's user's manual.



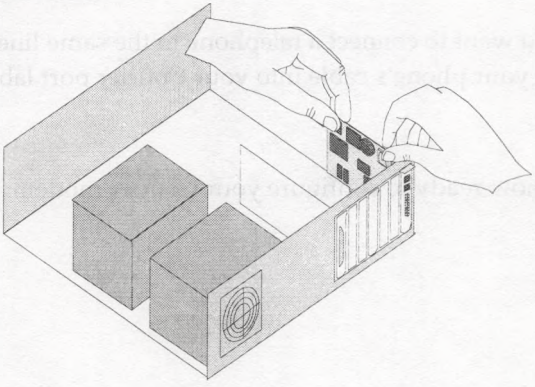
1 Turn off the computer's power and unplug the computer's power cord.



2 Remove the screws that hold on the computer's cover and slide the cover off.

3 Find an empty expansion slot that provides enough room to install your Courier.

4 Remove the screw that holds on the slot cover and remove the slot cover. Save the screw!



5 Insert your Courier into the slot and press down on the top edge of your Courier until it is seated firmly.

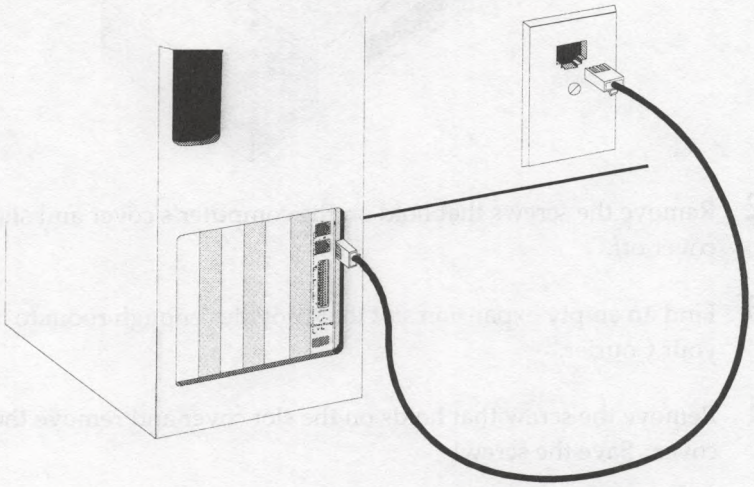
6 Using the screw you saved in Step 4, secure your Courier in your computer.

7 Replace the cover of your computer and tighten the screws.

You are now ready to connect the cables.

Step Four: Connecting the Cables

1 Connect one end of the phone cable to the telephone wall jack and the other end to the port on your Courier labeled JACK.



2 If you want to connect a telephone to the same line as your Courier, plug your phone's cable into your Courier port labeled PHONE.

You are now ready to configure your Courier modem.

Chapter 3
Installing Your External Courier

This chapter explains how to:

- Choose a serial cable
- Connect your Courier to your computer
- Connect the telephone line to your Courier

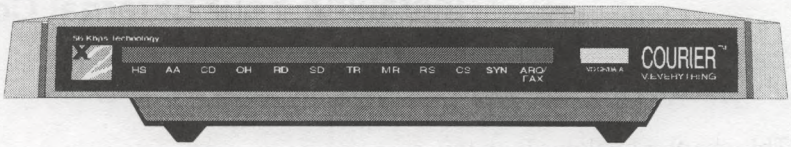
What You Need

You need the following to install your external Courier V.Everything:

- Computer or terminal with a serial port
- Analog telephone line

Warning: The Courier V.Everything requires a standard, analog telephone line. Do not connect your Courier to a digital telephone line. Digital lines are commonly used in office buildings and hotels. If you are unsure whether your line is analog or digital, ask your network administrator or your local telephone company.

Package Contents



Your Courier V.Everything package contains the following items:

- Courier V.Everything modem
- Power adapter
- Telephone cable
- Quick Reference card
- Customer Support card
- This Getting Started manual
- The *Connections* CD-ROM, which contains:
  - Courier V.Everything *Command Reference Guide*
  - RapidComm communications software and manuals
  - Stampede Remote Office Gold software and manuals
  - Special offers
  - An updated Courier V.Everything INF file

Note about serial cables: You need to purchase a serial cable to connect your Courier to your computer. Because there are a variety of connector types that different computers require, and many users may already have an existing modem and serial cable, a serial cable is not provided with your Courier.

These figures show the controls, displays, and connectors on your Courier V.Everything and indicate where to find more information about each.

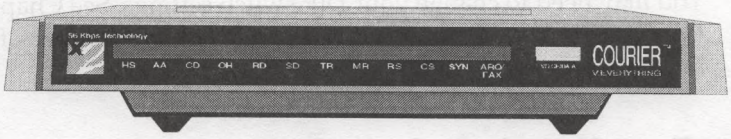


Figure 3.2 The Courier V.Everything Modem (Front)

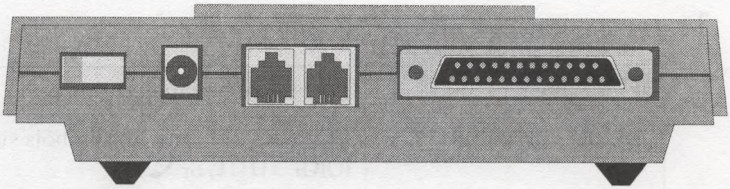


Figure 3.3 The Courier V.Everything Modem (Back).

Installing Your External Courier

To install your external Courier V.Everything, do the following:

Step One: Configure your Courier V.Everything with DIP (dual in-line package) switches

Step Two: Choose a serial cable

Step Three: Connect the cables

Step One: Configuring with DIP Switches

You may need to change your DIP switch settings. See Chapter 7, *Configuring Your Courier with DIP Switches and Jumpers*, for more information.

Step Two: Choosing a Serial Cable

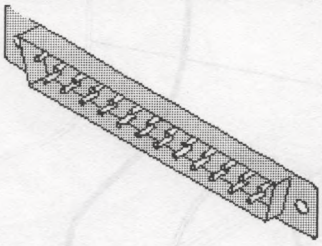
Before you can begin installation, you need to purchase an RS-232 serial cable. Use the following steps to choose the correct serial cable:

1 Look at the back of your computer for a port:

If you have	Ports may be labeled this way
An IBM-compatible PC	COM, RS-232, or with symbols such as IOIOI, ⎍⎍⎍, or ☎.
A Macintosh	☎ (modem port) or 🖶 (printer port)

Refer to your computer's documentation to determine where the port is.

2 Obtain a serial cable. Use the chart below to determine what type of cable to purchase:

If you have a serial connector in the back of your computer that looks like this	You need to purchase this type of shielded serial connector
	DB-25 female connector to DB-25 female connector
	DB-25 female connector to DB-9 female connector

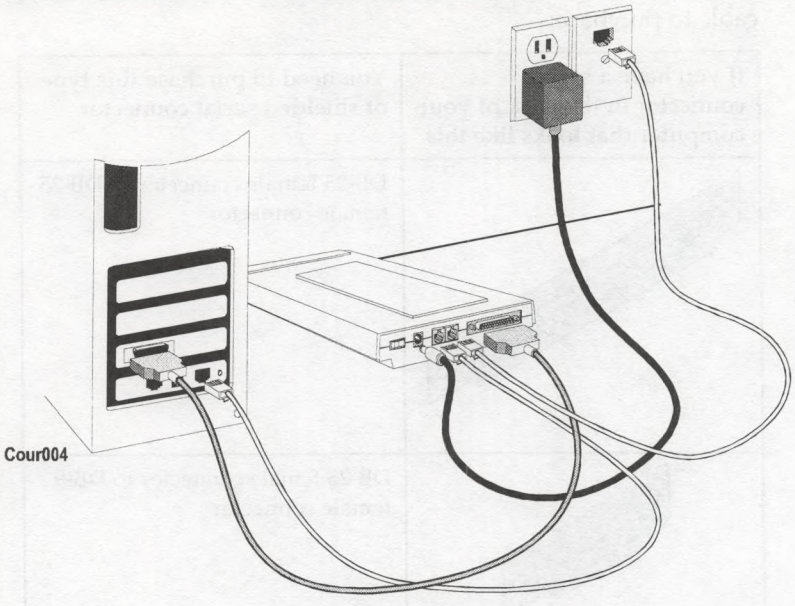
Notes for Macintosh Users

For top performance, your serial port should support speeds of 115.2 kbps. Most Macintosh serial ports support 57.6 kbps. To make your serial port operate faster, you may need to install a high-speed serial card designed for the Macintosh, such as a NuBus card.

Notes for Mainframe Users

If you plan to connect your Courier V.Everything to a mainframe computer or use your Courier to dial in to a mainframe computer, refer to Synchronous Applications in your Courier *V.Everything Command Reference* manual.

Step Three: Connecting the Cables



1 After you have selected the correct cable, connect the male DB-25 end of your serial cable to your Courier V.Everything and the other end to a serial port on your computer.

If you have an IBM-compatible PC, connect the male DB-25 to your Courier V.Everything and the other end to COM, RS-232, or with symbols such as **IOIOI**, ⎍⎍⎍, or .

If you have a Macintosh, connect the male DB-25 to your Courier V.Everything and the other end to (modem port) or (printer port)

> **Note:** Write down the number of the serial port to which you connect your Courier V.Everything. If your serial ports are lettered instead of numbered, A is COM1 and B is COM2. If you cannot find a serial port, consult the documentation that came with your computer.

2 Connect one end of the phone cable to the wall jack and the other end to your Courier V.Everything port labeled JACK.

3 If you have a telephone that you'd like to connect to your Courier V.Everything, plug its cable into your Courier port labeled PHONE.

4 Plug one end of the power adapter to your Courier V.Everything and the other end to a standard AC power outlet.

5 Switch your computer's power on.

You are now ready to configure your Courier V.Everything.

Chapter 4
Configuring Your Courier For Windows 95

This chapter explains how to:

- Configure your Courier with Plug and Play
- Obtain and install the latest Courier V.Everything files
- Configure Dial-Up Networking to access your ISP

Overview

The first time you start Windows 95 after you've installed your Courier, Windows 95 auto-detects your Courier. Since Windows 95 supports Plug and Play, most installations are trouble-free.

Note for external Courier users: You must power on your Courier V.Everything before you start Windows 95, or Windows 95 will not recognize your Courier V.Everything.

What You Need

You need Windows 95 with Dial-Up Networking installed to configure your Courier V.Everything for Windows 95.

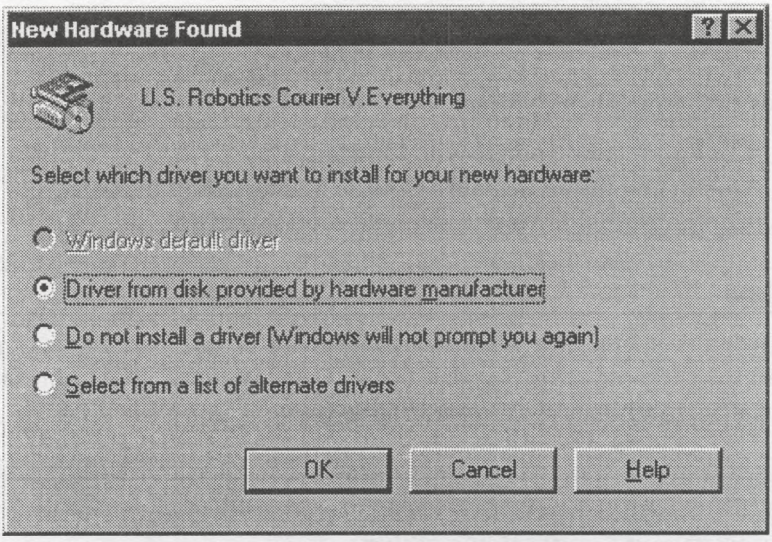
Configuring Your Courier With Plug and Play

Plug and Play mode allows Windows 95 to automatically detect your Courier V.Everything and determine which modem configuration file (called an INF file) to use.

Note for internal Courier users: If you do not want to use the Plug and Play mode of your operating system, you must manually change the jumpers on the modem to the desired COM port/ IRQ settings. For information about setting jumpers for different COM ports and IRQ settings, see Chapter 7, *Configuring Your Courier With DIP Switches and Jumpers.*

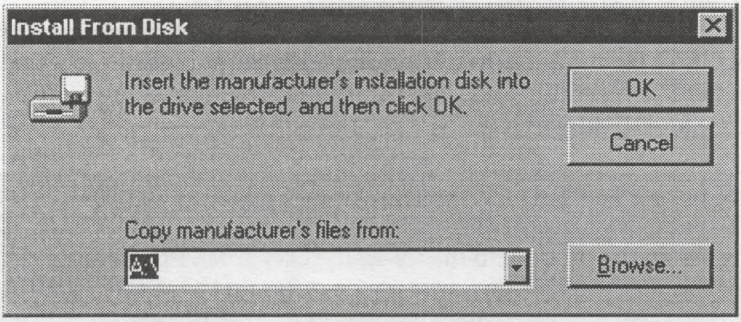
Follow the steps below to install the Courier V.Everything INF file for Windows 95:

1 Power on your computer and start Windows 95. Your computer detects new hardware and displays the following window:

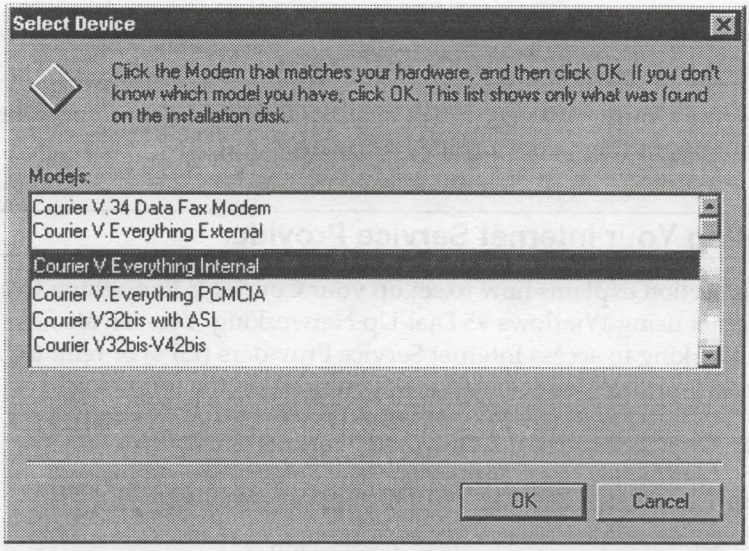

New Hardware Found
U.S. Robotics Courier V.Everything
Select which driver you want to install for your new hardware:
Windows default driver
Driver from disk provided by hardware manufacturer
Do not install a driver (Windows will not prompt you again)
Select from a list of alternate drivers
OK
Cancel
Help

2 Select **Driver from disk provided by hardware manufacturer** and click **OK** to install the INF file that is provided on the root directory (D:\) of the *Connections* CD-ROM.

3 When the following window appears, insert your *Connections* CD-ROM into, change the "Copy Manufacturer's files from" to D:\ (or the correct path of your CD-ROM) and click **OK** to install the INF file.



Windows 95 displays the following window asking you to choose your Courier V.Everything type from the list:


Select Device
Click the Modem that matches your hardware, and then click OK. If you don't know which model you have, click OK. This list shows only what was found on the installation disk.
Models:
Courier V.34 Data Fax Modem
Courier V.Everything External
Courier V.Everything Internal
Courier V.Everything PCMCIA
Courier V32bis with ASL
Courier V32bis-V42bis
OK
Cancel

4 Select the **Courier V.Everything Internal** or **Courier V.Everything Internal** from the list and click **OK**.

Your Courier V.Everything is now ready to use!

Files Needed By Your Courier

For your Courier V.Everything to work most efficiently, U.S. Robotics recommends that you obtain the newest version of the following two files from the U.S. Robotics web site (http://www.usr.com) or BBS (800.231.8770).

This file	Does this
The Courier V.Everything software	Contains software that contains new feature updates
The INF file	Helps your computer work more effectively with your Courier V.Everything

Installing the Latest Courier Software

See your Courier V.Everything *Command Reference Manual* for information about upgrading your Courier's software.

Accessing Your Internet Service Provider

This section explains how to set up your Courier V.Everything to access the Internet using Windows 95 Dial-Up Networking. You can also use Dial-Up Networking to access Internet Service Providers (ISPs) or remote LANs. To access your ISP or a remote LAN, you must do the following:

Step One: Determine if Dial-Up Networking is installed.

Step Two: Install Dial-Up TCP/IP support (if necessary)

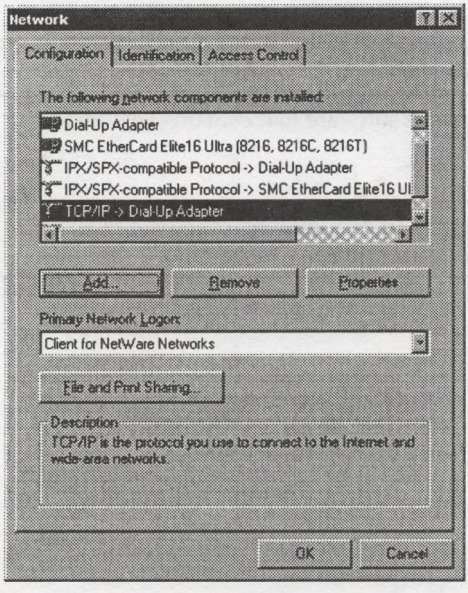
Step Three: Set up a connection to your ISP

Step Four: Customize TCP/IP settings (if necessary)

Step One: Determine if Dial-Up Networking is Installed

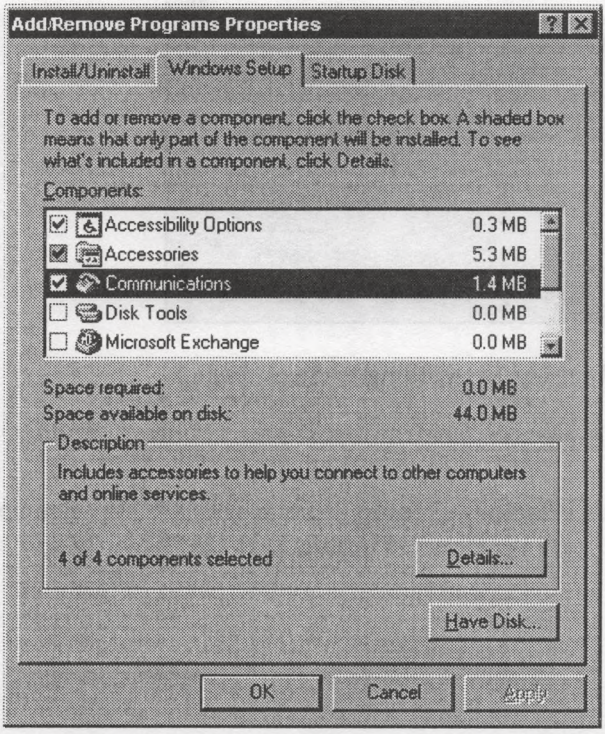
1 **Click Start | Settings | Control Panel.**

2 On the Control Panel, double-click on Network to display the Network Window.



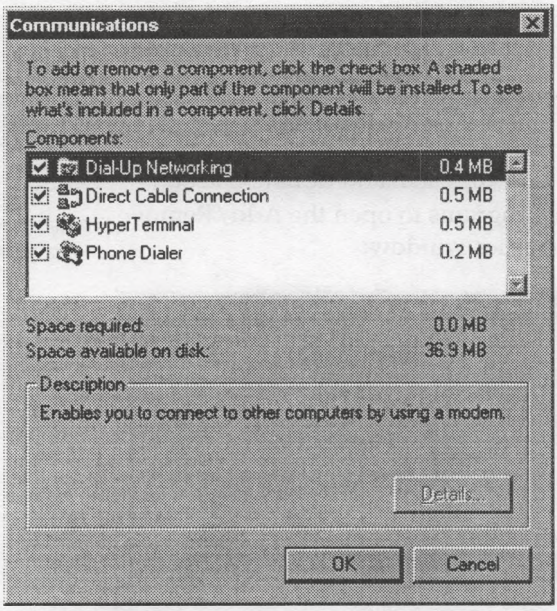
If Dial-Up Networking	Do this
Is listed	Go to the section "Installing TCP/IP Support" to install Dial-Up Networking.
Is not listed	Go to Step 3.

3 Return to the Control Panel and double-click on Add/Remove Programs to open the Add/Remove Programs Properties window:


Add/Remove Programs Properties
Install/Uninstall
Windows Setup
Startup Disk
To add or remove a component, click the check box. A shaded box means that only part of the component will be installed. To see what's included in a component, click Details.
Components:
Accessibility Options 0.3 MB
Accessories 5.3 MB
Communications 1.4 MB
Disk Tools 0.0 MB
Microsoft Exchange 0.0 MB
Space required: 0.0 MB
Space available on disk: 44.0 MB
Description
Includes accessories to help you connect to other computers and online services.
4 of 4 components selected
Details...
Have Disk...
OK
Cancel
Apply

4 Click Windows Setup tab.

5 Double-click on Communications to display the Communications window:


Communications
To add or remove a component, click the check box. A shaded box means that only part of the component will be installed. To see what's included in a component, click Details.
Components:
Dial-Up Networking 0.4 MB
Direct Cable Connection 0.5 MB
HyperTerminal 0.5 MB
Phone Dialer 0.2 MB
Space required: 0.0 MB
Space available on disk: 36.9 MB
Description
Enables you to connect to other computers by using a modem.
Details...
OK
Cancel

6 Click on Dial-Up Networking to check the box.

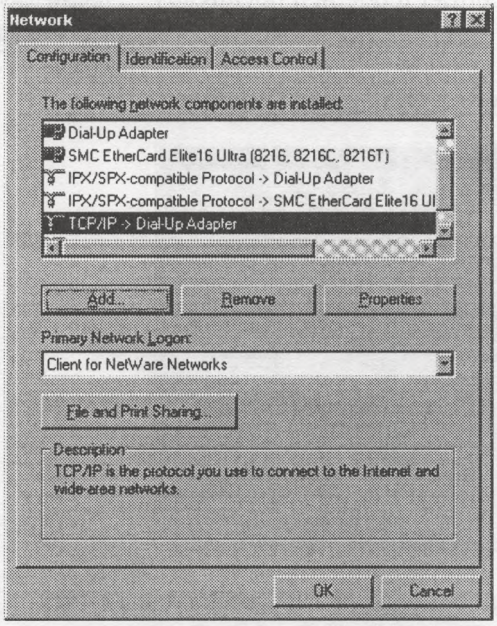
7 Click OK | OK.

8 Insert your Windows 95 Setup diskette or CD-ROM when you are prompted, and Windows 95 installs Dial-Up Networking.

Step Two: Installing Dial-Up TCP/IP Support

1 **Click Start | Settings | Control Panel.**

2 On the Control Panel, double-click on the Network icon to display the following window:



Determine if the TCP/IP Dial-Up Adapter is installed:

IF TCP/IP -> Dial-Up Adapter	**Do this**
Is not listed	Click **Add...	Protocol	Microsoft	TCP/IP	OK.** Insert your Windows 95 Setup diskette or CD-ROM when you are prompted, and Windows 95 installs TCP/IP protocol support.
Is listed	Read the section "Customize the TCP/IP Settings"

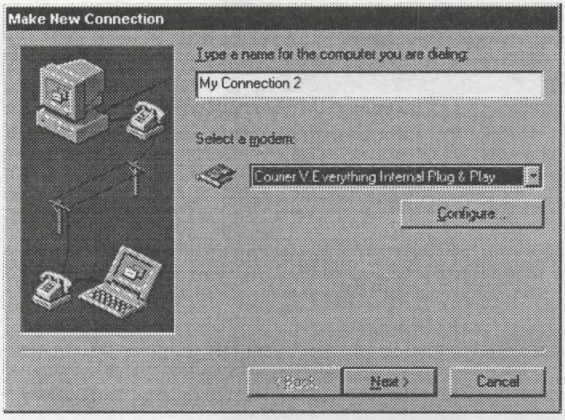
Step Three: Setting Up a Connection to Your ISP

1 Click **Start** | **Programs** | **Accessories** | **Dial-Up Networking**.

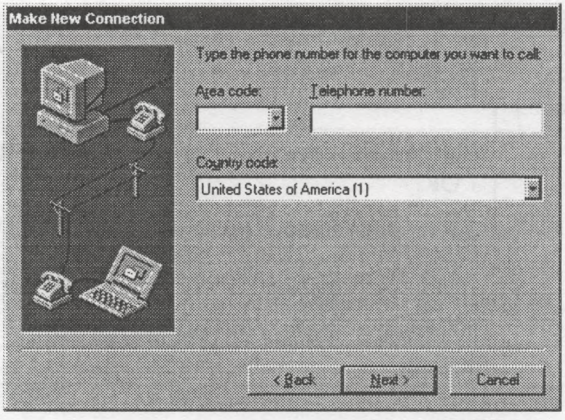
2 Double-click Make New Connection.

3 Select the correct Courier modem, if not already selected.

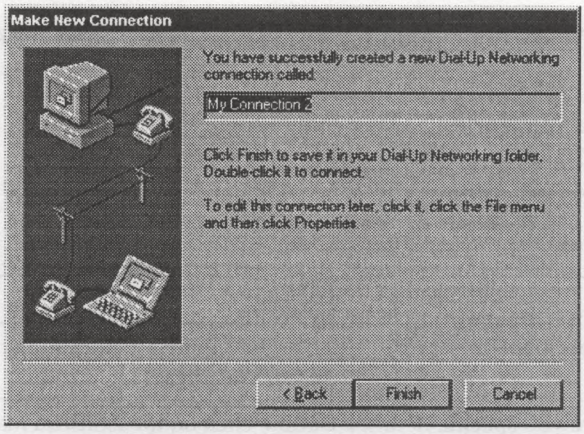
4 Type a name for the connection and click **Next**.



5 Type the phone number you want to dial and click **Next**.

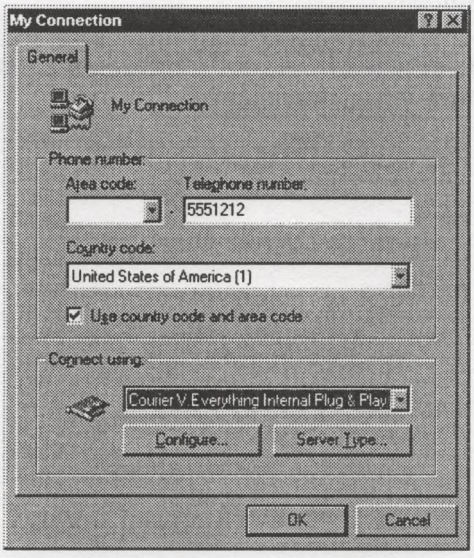


6 You should see a message indicating that a new connection was created successfully.


Make New Connection
You have successfully created a new Dial-Up Networking connection called:
My Connection 2
Click Finish to save it in your Dial-Up Networking folder. Double-click it to connect.
To edit this connection later, click it, click the File menu and then click Properties.
< Back
Finish
Cancel

7 Click **Finish.**

8 On the Dial-Up Networking window, move your cursor to the new icon you have just created and click the right mouse button. Select **Properties** on the menu to display the following window:



8 On the My Connection window, click **Server Type...**, and deselect the following:

- Log on to Network
- NetBEUI
- IPX/SPX Compatible

9 Click **OK**, and **OK**.

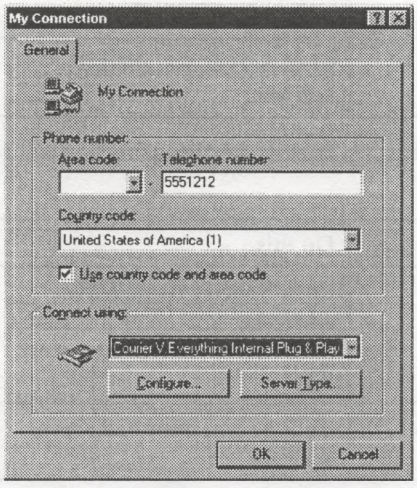
If your ISP	Do this
Gives you specific IP or server addresses	Go to **Step Four: Customizing TCP/IP Settings**
Does not give you specific IP or server addresses	Double-click on the icon you just created to dial your ISP.

Step Four: Customizing the TCP/IP Settings

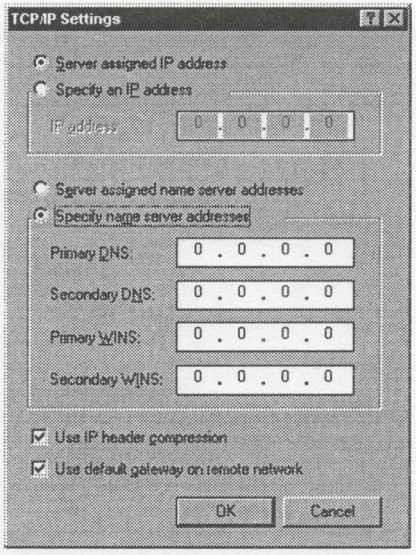
Depending on the ISP you use, you may need to customize the TCP/IP settings. Contact your ISP for specific information, such as IP address, or domain name servers (DNS).

1 Click My Computer and double-click Dial-Up Networking icon to display all the connections you can customize.

2 Right-click the icon you created and select **Properties** to display the My Connection window.



3 On the My Connection window, click **Server Type** to display the TCP/IP Settings window.


TCP/IP Settings
Server assigned IP address
Specify an IP address
IP address:
0 . 0 . 0 . 0
Server assigned name server addresses
Specify name server addresses
Primary DNS:
0 . 0 . 0 . 0
Secondary DNS:
0 . 0 . 0 . 0
Primary WINS:
0 . 0 . 0 . 0
Secondary WINS:
0 . 0 . 0 . 0
Use IP header compression
Use default gateway on remote network
OK
Cancel

4 Specify an **IP address**, if needed:

If your ISP	Do this
Gives you a specific IP address	Click **Specify an IP address** and enter the IP address provided by your ISP
Does not give you a specific IP address	Click **Server assigned IP address**

5 After you specify an **IP Address**, specify **server assigned server addresses**, if needed:

If your ISP	Do this
Gives you specific server addresses	Click **Specify name server addresses** and enter the server address(es) provided by your ISP
Does not give you specific server addresses	Click **Server assigned server address**

Double-click your New Connection icon to connect!

Chapter 5
Configuring Your Courier For Macintosh

This chapter explains how to configure your Courier V.Everything for use with Macintosh computers.

Note: There are many ways to configure your Macintosh to use the Internet. Consult your Macintosh documentation for more information.

Handshaking Cable

Use a hardware handshaking cable to connect your Courier V.Everything to the Macintosh.

System Configuration

Also, if you aren't using AppleTalk® Remote Access (ARA), set AppleTalk to **Inactive** (in Chooser).

Important: Your Macintosh Courier V.Everything DIP switches should have been set to 3, 5, and 8 ON. To use the Courier V.Everything with your Macintosh you must also set DIP switch 1 to ON.

The modem initialization string should be AT&F1&D0.

For instructions about how to set up your Macintosh communications software package, consult your Macintosh documentation or visit the U.S. Robotics Totalservice web site at http://totalservice.usr.com.

Accessing the Internet

Accessing the Internet through an ISP requires the following software:

- MacTCP or Open Transport (TCP/IP from the Control Panels menu), which has probably already been installed on your Macintosh
- SLIP or PPP dialing software

Note: You can find public domain PPP dialers (such as MacPPP and FreePPP) on the Internet.

Configuring MacTCP

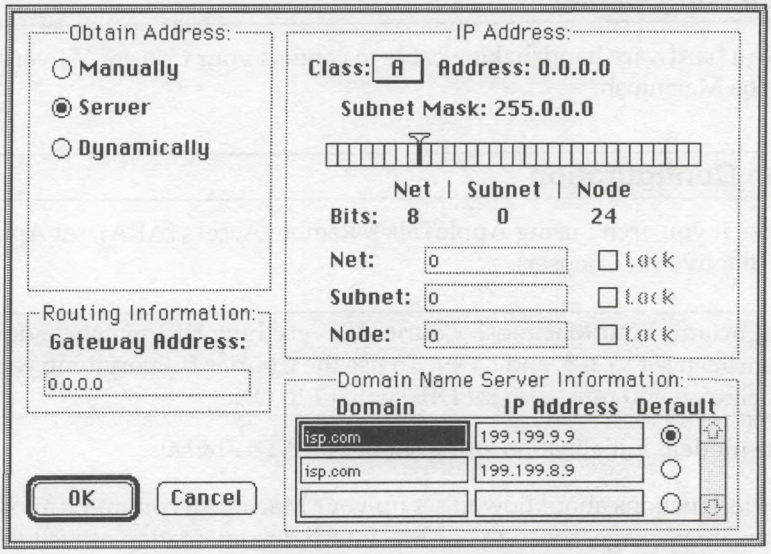
1 Open the MacTCP control panel.

2 Click **PPP** and **More...**

3 In Obtain Address group box, click **Server**.

4 In Domain Name Server Information, enter the domain name and IP address for one or more domain name servers.

Note: If you don't have domain name server information, contact your ISP.



When you're finished configuring MacTCP, restart your Macintosh.

Installing MacPPP Dialer

When you install MacPPP for the first time, a PPP icon appears in the MacPPP folder. Put the PPP icon in the Extensions Folder, in the System Folder, and restart your Macintosh.

Configuring ConfigPPP Dialer

1 ConfigPPP is your PPP dialer.

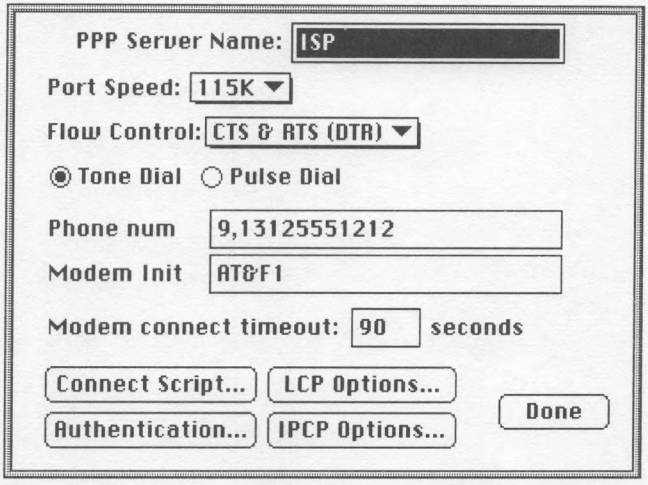
2 Open ConfigPPP and click **New...**

3 Enter your Port Name and click **OK**.

4 Click **Config...** and set your Port Speed (the fastest speed for MacPPP is 57.6 kbps), phone number, and modem initialization string.

5 Click **Authentication...** and enter the user name and password your ISP assigned you.

6 Click **Done**.



Dialing With ConfigPPP

In ConfigPPP, click **Open**. ConfigPPP dials your ISP and establishes your PPP connection.

Chapter 6
Configuring Your Courier for Other Operating Systems

This chapter explains how to configure your Courier V.Everything for:

- Windows 3.x
- Windows NT
- MS-DOS
- OS/2
- UNIX, Linux, or AIX

If You Are Using Windows 3.x

Windows 3.x comes with a built-in communications software package, Windows Terminal. You can use Windows Terminal to test your Courier V.Everything or you can install the communications software package that is included on the *Connections* CD-ROM.

Because Windows Terminal only supports speeds up to 19200 bps, it is recommended that you use a third-party communications software package.

For instructions about how to set up your Windows 3.x communications software package, visit the U.S. Robotics Totalservice web site at http://totalservice.usr.com.

If You Are Using Windows NT 4.0

What You Need

You need Windows NT with Remote Access Service (RAS) installed to configure your Courier V.Everything for Windows NT.

Configuring Your Courier

To obtain and install the Courier V.Everything INF file for Windows NT, follow the same steps as Windows 95 users.

See section "Configuring Your Courier" in Chapter 4.

Installing the Latest Courier Software

After you obtain the latest Courier V.Everything INF file, copy it to the C:\WINNT\INF subdirectory.

For more information about Windows NT, see Windows NT documentation or visit the U.S. Robotics Totalservice web site at http://totalservice.usr.com.

If You Are Using MS-DOS

Because there is no communications software built in to MS-DOS, you must install and run a third-party communications software package to operate your Courier V.Everything.

You must choose the COM port to which your Courier V.Everything is attached in whatever communications software package you are using.

For instructions about how to set up your MS-DOS communications software package, see the software documentation or visit the U.S. Robotics Totalservice web site at http://totalservice.usr.com.

For Internal Couriers Only

You must choose the COM port, IRQ, and the I/O address within the communications software that you use. These are the standard I/O address and IRQ settings for each COM port:

COM Port	I/O Address	IRQ
COM1	03F8	IRQ4
COM2	02F8	IRQ3
COM3	03E8	IRQ4
COM4	02E8	IRQ3

If You Are Using OS/2

Replace the standard OS/2 serial port drivers COM.SYS and VCOM.SYS with SIO.SYS and VSIO.SYS. You can get these enhanced drivers from the U.S. Robotics web site.

For instructions about how to set up your OS/2 communications software package, visit the U.S. Robotics Totalservice web site at http://totalservice.usr.com.

For Internal Couriers Only

These are the standard I/O address and IRQ settings for each COM port:

COM Port	I/O Address	IRQ
COM1	03F8	IRQ4
COM2	02F8	IRQ3
COM3	03E8	IRQ4
COM4	02E8	IRQ3

Nonstandard COM/IRQ settings are done by adding switches (command line parameters) to the COM.SYS (or SIO.SYS) line in CONFIG.SYS.

For example, to select COM3 and IRQ5, enter the following command line:

```
\OS2\BOOT\COM.SYS /i5/c3
```

If You Are Using UNIX, Linux, or AIX

To set your Courier V.Everything to answer incoming calls, set DIP switch 3 OFF; set 4 and 8 ON.

Linux has a built-in communications software package called minicom. You can obtain minicom on the U.S. Robotics FTP site (ftp.usr.com) in the usr/bin directory.

For instructions about how to set up your UNIX®, Linux, or AIX communications software package, visit the U.S. Robotics Totalservice web site at http://totalservice.usr.com.

Configuring Your Internal Courier for Dial-In Only

If you are using your Courier V.Everything for dial-in only, set DIP switch 4 ON, and leave the other switches in their default positions. You may need to set DIP switch 1 ON if your computer does not send a Data Terminal Ready (DTR) signal.

Configuring Your Internal Courier for Dial-In and Dial-Out

If you are using your Courier V.Everything for dial-in and dial-out, set DIP switches 3, 4, 7, and 8 ON, and leave the other switches in their default positions. You may need to set DIP switch 1 ON if your computer does not send a Data Terminal Ready (DTR) signal.

These are the standard port names and settings:

Outgoing Calls	Incoming Calls	Port	IRQ	I/O Address
/dev/cua0	/dev/ttyS0	COM1	4	03F8
/dev/cua1	/dev/ttyS1	COM2	3	02F8
/dev/cua2	/dev/ttyS2	COM3	4	03E8
/dev/cua3	/dev/ttyS3	COM4	3	02E8

Use the **setserial** command to tell Linux about any nonstandard COM/IRQ combinations that you may have set using your Courier's jumpers. Setserial also selects serial port speed and I/O port address.

Chapter 7
Configuring Your Courier With DIP Switches and Jumpers

This chapter explains how to:

- Locate DIP switches on internal and external Couriers
- Configure with DIP switches
- Configure with jumpers (internal Courier V.Everything only)

DIP Switches on the External Courier

Locating DIP Switches

On the external Courier V.Everything, the DIP switches are on the bottom of the unit.

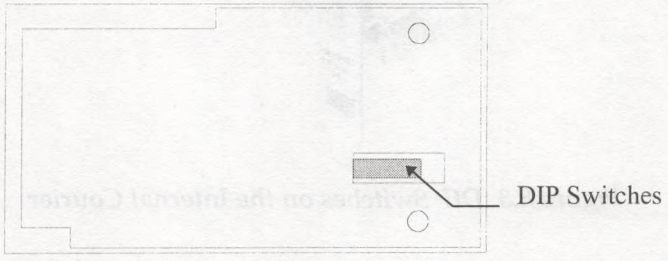


Figure 8.1 DIP Switches on the External Courier

Default DIP Switches

DIP switches 3, 5, and 8 are ON. For Macintosh, you must change DIP switch 1 to ON.

Figure 8.2 Default DIP Switches for the External Courier

DIP Switches on the Internal Courier

Locating DIP Switches

On the internal Courier V.Everything, the DIP switches are on the end of the unit.

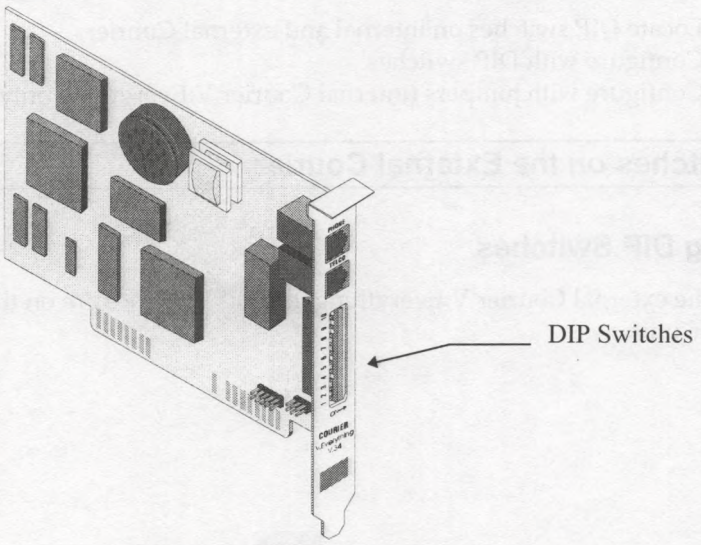


Figure 8.3 DIP Switches on the Internal Courier

Default DIP Switches

DIP switches 3, 5, and 8 are ON. For Macintosh, you must change DIP switch 1 to ON.

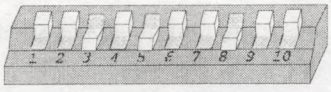


Figure 8.4 Default DIP Switches for the Internal Courier

Using DIP Switches to Configure Your Courier

To do this	Set DIP Switch	To this setting
Set DTR to Normal	1	OFF (Default)
Ignore DTR		ON
Set verbal result code display	2	OFF (Default)
Set numeric result code display		ON
Disable result codes	3	OFF
Enable result codes		ON (Default)
Enable the echo in offline commands	4	OFF (Default)
Disable the echo in offline commands		ON
Enable auto answer	5	OFF
Disable auto answer		ON (Default)
Enable normal Carrier Detect	6	OFF (Default)
Disable normal Carrier Detect		ON
Display result codes In ALL modes	7	OFF (Default)
Display result codes in orginate mode only		ON
Disable AT commands	8	OFF
Enable AT commands		ON (Default)
Disconnect on escape (+++)	9	OFF (Default)
Don't disconnect on escape (+++)		ON
Load the configuration that is stored in non-volatile memory (NVRAM)	10	OFF (Default)
Load the &F0 configuration from read-only memory (ROM)		ON

Locating Jumpers

Your internal Courier V.Everything is set to Plug and Play. You shouldn't have to change this setting, however, if you have multiple devices connected to your system, you may need to change the jumper settings to avoid hardware conflicts.

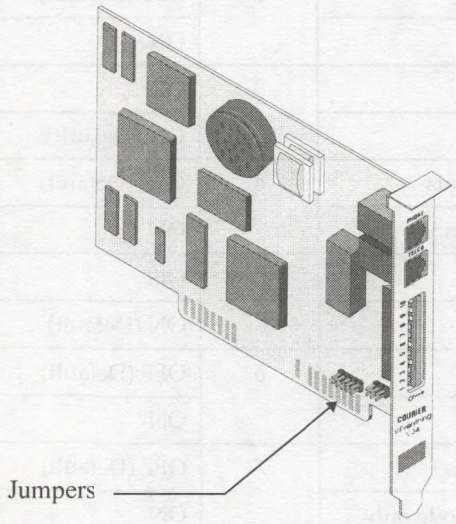


Figure 8.5 Jumpers on the Internal Courier

Changing Jumper Settings

You can add shunts (see figure 8.7) to cover sets of pins on the jumper blocks (see figure 8.6).

Caution: If you do not have any hardware conflicts, you do not need to use this section.

To change jumper settings, use tweezers or needle-nosed pliers and gently rock the jumper back and forth as you lift.

Note: Do not grasp the shunts too firmly. If you grasp them too firmly, you may crush the shunt or damage the modem.

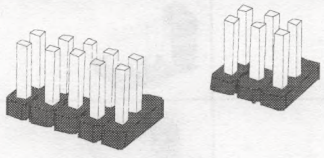
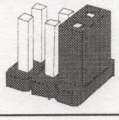


Figure 8.6 Jumper Blocks Without Shunts

Figure 8.7 Shunt

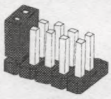
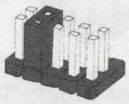
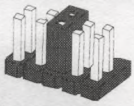
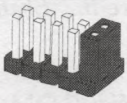
Setting Jumpers for a Specific COM Port

You can put shunts on the COM port jumper block to configure the desired COM port:

To set your modem to	To set the jumpers to
COM 1	
COM 2	
COM 3	
COM 4	

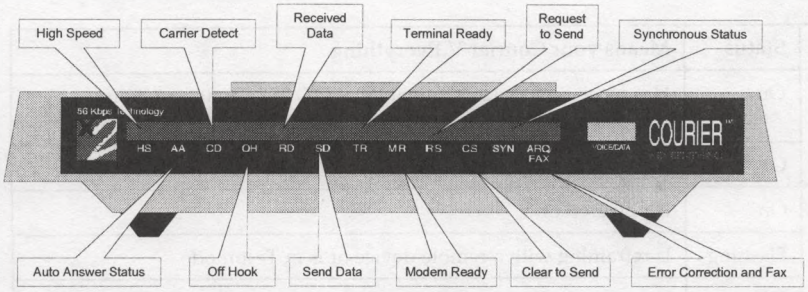
Setting Jumpers for a Specific IRQ

You can put shunts on the IRQ jumper block to configure the desired IRQ:

To set your modem to	To set the jumpers to
IRQ 3	
IRQ 4	
IRQ 5	
IRQ 7	
IRQ 9	

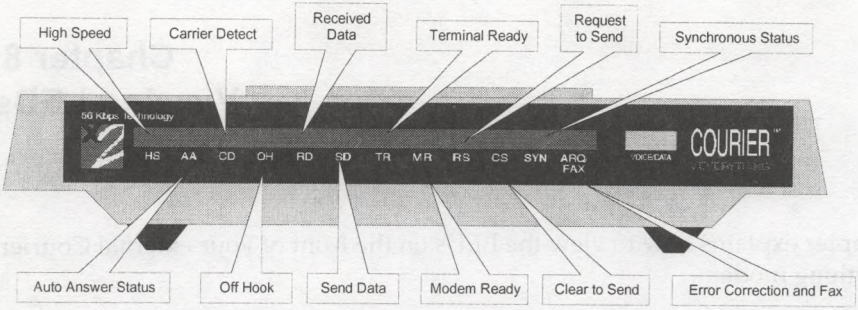
Chapter 8
Viewing LEDs

This chapter explains how to view the LEDs on the front of your external Courier V.Everything modem.



There are 12 LEDs on the front of your Courier V.Everything.

This LED	Status	Means your Courier V.Everything
HS	On	Has made a 4800 bps or faster connection. Once this light is on, it remains on until reset. This can be configured with **S69**.
	Off	Has not made a 4800 bps or faster connection since last reset
AA	On	Is ready to accept calls
	Blinking	Has detected an incoming call
	Off	Is not ready to accept calls
CD	On	Has detected a carrier from a remote device or carrier-detect has been forced on (using DIP switch 6)
	Off	Has not detected a carrier
OH	On	Has control of the line
	Off	Does not have control of the line
RD	Flashing	Is sending data to your computer
	Off	Is idle
SD	Flashing	Is receiving data from your computer
	Off	Is idle



This LED	Status	Means your Courier V.Everything
TR	On	Has received a Data Terminal Ready (DTR) signal from your computer, or DTR is forced on (using DIP switch 1)
	Off	Has not detected DTR
MR	On	Is powered on
	Flashing	Is retraining with a remote device or is in Test mode
	Off	Is powered off
RS	On	Has detected the Ready to Send (RTS) signal from your computer
	Off	Has not detected the RTS signal from your computer
CS	On	Is sending your computer the Clear to Send (CTS) signal
	Off	Is not sending your computer the CTS signal
SYN	On	Is in synchronous mode
	Blinking	Has activated Dial Security
	Off	Is not in synchronous mode/Dial Security not active
ARQ/FAX	On	Is using V.42 *bis* error correction
	Flashing	Is retransmitting data to the remote modem
	Blinking	Is in fax mode
	Off	Is not using error control, not retransmitting data, and not faxing

Chapter 9
Testing Your Courier

This chapter explains how to:

- Test your Courier V.Everything using Windows 3.x, Windows NT, and Windows 95
- Test your Courier V.Everything using Macintosh

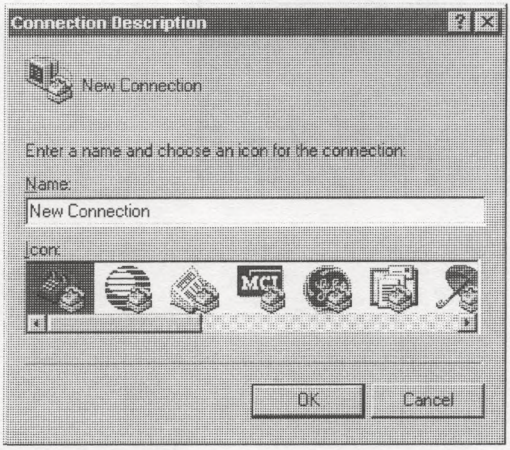
Testing your Courier

Using Windows NT, and Windows 95

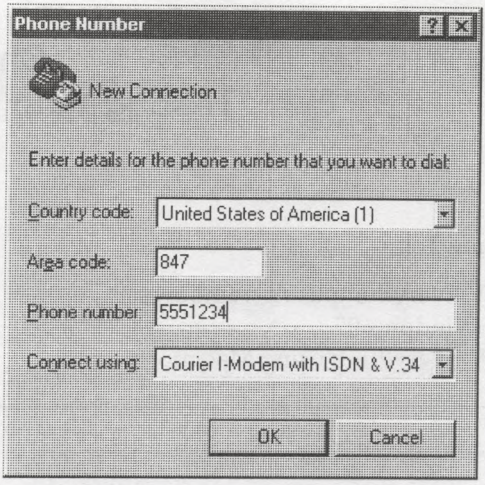
To test your Courier, use any communications software package, such as Windows Terminal, HyperTerminal, or Procomm Plus. HyperTerminal is used as an example. Every communications program is different; consult the documentation that came with your communications program for more information.

1 Run HyperTerminal.

2 Enter the name of your connection in **Name** and click **OK**.



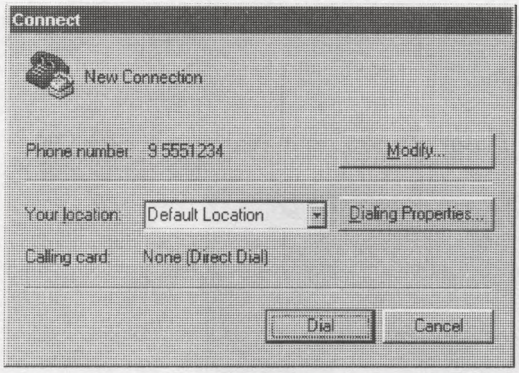
3 Enter the phone number you want to dial in **Phone number** and click **OK**. If you only want to test your modem, you may enter any number.



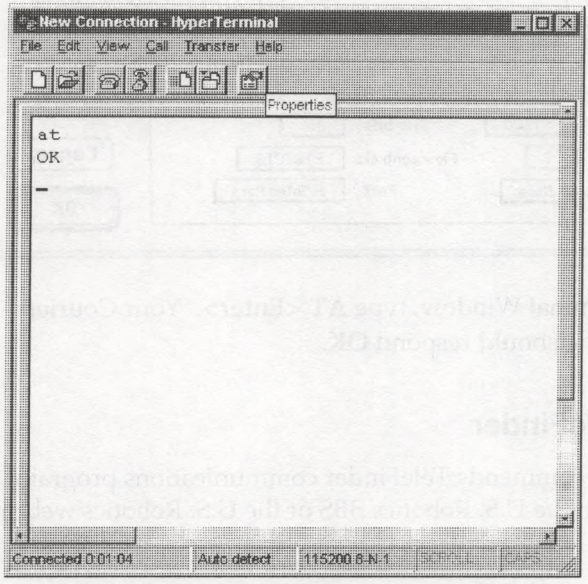
4 Change any properties and:

Click **Dial** to dial a number, or

Click **Cancel** if you want to test without dialing a number.



5 When the HyperTerminal terminal window appears, enter **AT** and hit **<enter>**. If your modem is connected and configured properly, you will see "OK" on the terminal screen.



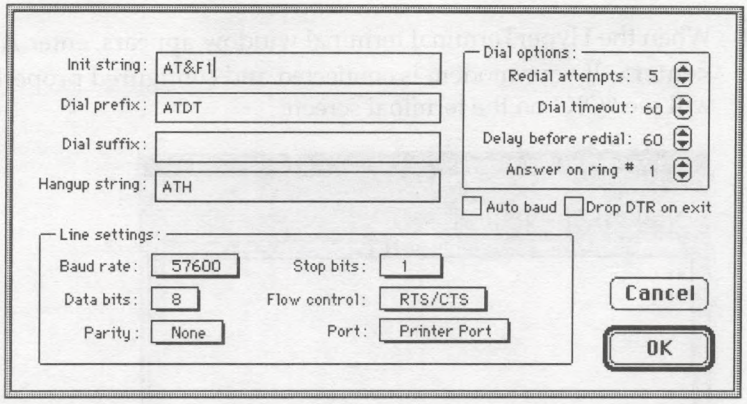
Using Macintosh

Install MacComCenter according to the directions in its user's manual, which is on the *Connections* CD-ROM.

1 When you start MacComCenter, select **Setup | Modem...** The following panel appears.

2 Use the settings below (Your port setting may be different).

3 Select the port to which your Courier V.Everything is attached (**Modem Port** or **Printer Port)** and click **OK**.



4 On the Terminal Window, type **AT <Enter>**. Your Courier V.Everything should respond **OK**.

Testing With TeleFinder

U.S. Robotics recommends TeleFinder communications program, which is available free on the U.S. Robotics BBS or the U.S. Robotics web site.

Chapter 10
Using x2

Use this chapter to perform the following actions:

- Determine if your Courier V.Everything has x2 enabled
- Enable x2
- Use the new features

Enhanced x2 Features

Your Courier V.Everything with x2™ has new result codes and the following new features.

To do this	Use this command
Detemine if x2 is enabled in your modem	ATI7
Disable or enable x2	ATS58
Limit the upper speed limit of an x2 connection	AT&N
Limit the lower speed limit of an x2 connection	AT&U
Configure the High Speed (HS) LED	ATS69

Note: New x2 features should be transparent to most users. If you are an advanced user, see the sections "Controlling x2" and "Controlling Link Speeds with &N and &U" later in this chapter for detailed information regarding these features.

How to Tell if x2 is Enabled in Your Modem

If you aren't sure whether x2 is enabled in your Courier V.Everything, use the ATI7 command to display product configuration information. If x2 is enabled on your Courier V.Everything, the following information displays:

```
USRobotics Courier V.Everything Configuration Profile...
Copyright, 19xx-96, U.S. Robotics. All rights reserved.

Product type            US/Canada External
Options                 HST,V32bis,Terbo,VFC,V34+,x2
Fax Options             Class 1,Class 2.0
Clock Freq              {Clock Frequency}
Eprom                   256k
Ram                     32k

Supervisor date         {Date}
DSP date                {Date}

Supervisor rev          {x.x.x}
DSP rev                 {x.x.x}

Serial Number           {serial number}

OK
```

Note: Dates, serial numbers, revision numbers, and Clock Frequencies may vary. The most important line is the "Options" line, which lists support for x2.

Obtaining x2

For information about how x2 works, visit the x2 web site at http://www.usr.com/x2

How x2 Works

For information about how x2 works, visit the x2 web site at http://www.usr.com/x2

Controlling x2

Use the following S58 settings to control x2:

To do this	Use this command
Disable x2	ATS58.0=1
Force A-law mode	ATS58.2=1

Table 12.1 Controlling x2

Note: A-law is required in all countries but the United States, Canada, Japan, Taiwan, and Hong Kong. If you are using your Courier V.Everything in one of these countries, do not force A-law mode.

Controlling Link Speeds with &N and &U

You can use the &N and &U commands to control link speeds. Couriers without x2 can still use the &N and &U commands, but can only control link speeds up to 33.6 kbps.

Controlling Link Speeds

You can use the &N and &U commands to control the link speeds of your Courier V.Everything with x2. Use the following table to determine how to use &N and &U commands:

To limit the	Use
Highest possible connect speed	&N
Lowest possible connect speed	&U
Range of possible connect speeds	&N and &U

Table 12.2 Using Link Speeds

Note: The default values for &N and &U are 0. If you change these values, you will limit the speeds at which you can connect.
U.S. Robotics recommends that you do not alter these values.

Limiting the Highest Possible Connect Speed

The &N command allows you to limit the highest possible connect speed. If a remote modem attempts to connect to your Courier with x2 at a speed higher than &N, your Courier with x2 will not allow it to connect.

To limit the	Use this command	Where x is
Highest possible connect speed	AT&N=x	A value from 0 to 32

Note: See table 12.4 for a list of connect speed values.

Limiting the Lowest Possible Connect Speed

The &U command allows you to limit the lowest possible connect speed. If a remote modem attempts to connect to your Courier with x2 at a speed lower than &U, your Courier with x2 will not allow it to connect.

To limit the	Use this command	Where x is
Lowest possible connect speed	AT&U=x	A value from 0 to 32

Note: See table 12.4 for a list of connect speed values.

Limiting a Range of Possible Connect Speeds

By setting &N and &U values, you can limit the range of speeds at which your Courier with x2 connects. If a remote modem does not connect to your Courier with x2 at a range between the speeds designated by the &N and &U commands, your Courier with x2 will not allow it to connect.

Note: The link speed associated with the &U argument cannot be greater than the link speed associated with &N argument.

Use the following table to understand the relationship between &U and &N commands:

If &U	And &N	Then your modem
Equals zero	Equals zero	Connects at the highest possible speed.
	Is greater than zero	Connects at the &N speed only.
Is greater than zero	Is greater than zero and greater than &U	Connects at the highest possible speed in the range from &U to &N.

Table 12.3 Constraints on Link Speed

&N and &U Command Values

Use the following table for a complete list of &N and &U link speeds and their associated indexes:

Link Speed	Index
Highest	0
300	1
1200	2
2400	3
4800	4
7200	5
9600	6
12000	7
14400	8
16800	9
19200	10

Link Speed	Index
21600	11
24000	12
26400	13
28800	14
31200	15
33600	16
33333	17
37333	18
41333	19
42666	20
44000	21

Link Speed	Index
45333	22
46666	23
48000	24
49333	25
50666	26
52000	27
53333	28
54666	29
56000	30
57333	31
64000	32

Table 12.4 Link Speeds and Indexes

Note: For x2-mode links, &N and &U are used to constrain the speed of the higher speed direction of the link.

Configuring the High Speed LED

You can configure your external Courier V.Everything to alert you when it reaches x2 speeds. Use the following S69 setting to configure the HS (High Speed) LED:

To do this	Use this command
Configure the HS LED to turn red when your modem reaches speeds over 33.3 kbps.	ATS69=12

Troubleshooting x2 Client Connections

Use the chart below to understand issues affecting your Courier V.Everything with x2 and how to fix them:

<table>
<tr><th>This may be the issue</th><th colspan="2">Do this</th></tr>
<tr><td>x2 may not be enabled on your Courier.</td><td colspan="2">See the section "How to Tell if x2 is Enabled" (Use the ATI7 command)</td></tr>
<tr><td rowspan="4">Several conditions may exist.</td><td colspan="2">Use the ATI11 command and check the "x2 status" field for more information.</td></tr>
<tr><td>If this message appears</td><td>You cannot use x2 because</td></tr>
<tr><td>"Multiple CODECS in channel"</td><td>There are multiple analog-to-digital conversions on the channel.</td></tr>
<tr><td>"Remote modem is not x2"</td><td>The remote modem does not support x2.</td></tr>
<tr><td>"Channel is x2-capable but feature is not installed"</td><td>You have not purchased x2.</td></tr>
<tr><td>Your Courier may be connected to the public network via a PBX or other telephone equipment with analog-to-digital and digital-to-analog conversions.</td><td colspan="2">Contact your telephone equipment vendor for information about obtaining pure analog service.

Due to extra analog-to-digital conversions performed by some PBX's and other telephone equipment, x2 client modems may not be able to make x2 connections.</td></tr>
<tr><td>There is another issue.</td><td colspan="2">Do the following:

• Visit the U.S. Robotics x2 web site at http://www.usr.com/x2

• Contact U.S. Robotics Technical Support at 800.231.8770</td></tr>
</table>

Setting DTE Rate to 230 Kbps

The DTE rate of your Courier V.Everything has been increased to 230 kbps to enhance throughput.

Note: This command is only supported on internal Courier V.Everything modems with Plug and Play on external modems attached to high speed serial cards.

You can only change the DTE rate on Courier V.Everything modems that have a 25 MHz clock frequency. Earlier versions of the Courier had a 20 MHz clock frequency and do not allow 230 kbps DTE rate.

Use the following table to control the 230 kbps DTE rate:

To set the modem to operate	Use this command
At Normal mode (115 kbps)	%G0
At Times Two mode (230 kbps)	%G1

Note: Using this command, if the DTE rate is set to 115 kbps the modem will respond at 230 kbps. This command will take affect immediately upon execution. The next AT command will operate at 230 kbps.

New x2 Result Codes

Use the following table for a list of all result codes, including new x2 result codes:

Numeric	Alphanumeric
180	CONNECT 33333
181	CONNECT 33333/ARQ
182	CONNECT 33333/x2
183	CONNECT 33333/ARQ/x2
184	CONNECT 37333
185	CONNECT 37333/ARQ
186	CONNECT 37333/x2
187	CONNECT 37333/ARQ/x2
188	CONNECT 41333
189	CONNECT 41333/ARQ
190	CONNECT 41333/x2
191	CONNECT 41333/ARQ/x2
192	CONNECT 42666
193	CONNECT 42666/ARQ
194	CONNECT 42666/x2
195	CONNECT 42666/ARQ/x2
196	CONNECT 44000
197	CONNECT 44000/ARQ
198	CONNECT 44000/x2
199	CONNECT 44000/ARQ/x2
200	CONNECT 45333
201	CONNECT 45333/ARQ
202	CONNECT 45333/x2
203	CONNECT 45333/ARQ/x2
204	CONNECT 46666
205	CONNECT 46666/ARQ
206	CONNECT 46666/x2

New x2 Result Codes (Continued)

Numeric	Alphanumeric
207	CONNECT 46666/ARQ/x2
208	CONNECT 48000
209	CONNECT 48000/ARQ
210	CONNECT 48000/x2
211	CONNECT 48000/ARQ/x2
212	CONNECT 49333
213	CONNECT 49333/ARQ
214	CONNECT 49333/x2
215	CONNECT 49333/ARQ/x2
216	CONNECT 50666
217	CONNECT 50666/ARQ
218	CONNECT 50666/x2
219	CONNECT 50666/ARQ/x2
220	CONNECT 52000
221	CONNECT 52000/ARQ
222	CONNECT 52000/x2
223	CONNECT 52000/ARQ/x2
224	CONNECT 53333
225	CONNECT 53333/ARQ
226	CONNECT 53333/x2
227	CONNECT 53333/ARQ/x2
228	CONNECT 54666
229	CONNECT 54666/ARQ
230	CONNECT 54666/x2
231	CONNECT 54666/ARQ/x2
232	CONNECT 56000

New x2 Result Codes (Continued)

Numeric	Alphanumeric
233	CONNECT 56000/ARQ
234	CONNECT 56000/x2
235	CONNECT 56000/ARQ/x2

Table 12.5 New Result Codes

There is a complete list of result codes in your Courier V.Everything *Command Reference.*

Appendix A
Technical Information

This chapter describes technical and serial port information.

Technical Specifications

Standards Compatibility

Your Courier V.Everything uses multiple standard data communications protocols and is also compatible with many nonstandard schemes. The following schemes are supported:

Modulation

This modulation	Supports
x2	Up to 56 kbps
ITU-T V.34	33.6/31.2/28.8/26.4/24/21.6/19.2/16.8/14.4/12 kbps; 9600/7200/4800 bps asynchronous Trellis Coded Modulation (TCM)
V.FC	28.8/26.4/24/21.6/19.2/16.8/14.4 kbps asynchronous TCM
V.32 *terbo*	21.6/19.2/16.8/14.4/12 kbps; 9600/7200 bps asynchronous TCM; 4800 bps asynchronous Quadrature Amplitude Modulation (QAM)
HST	16.8/14.4/12 kbps; 9600/7200 bps asynchronous, asymmetrical, 450 bps back channel with automatic handshake adjustment to 300 bps TCM and QAM; 4800 bps asynchronous, asymmetrical, 450 bps back channel with automatic handshake adjustment to 300 bps QAM.
ITU-T V.32 *bis*	14.4/12 kbps; 9600/7200 bps asynchronous TCM; 4800 bps asynchronous QAM
ITU-T V.32	9600 bps asynchronous, TCM; 4800 bps asynchronous, QAM
ITU-T V.22 *bis*	2400 bps asynchronous, QAM
Bell 212A	1200 bps (also V.22) asynchronous, Differential Phase Shift Keying (DPSK)
ITU-T V.23	1200 bps asymmetrical with 75 bps back channel with

This modulation	Supports
	Frequency Shift Keying (FSK), used by some U.K. and European phone systems.
Bell 103	300 bps (ITU-T V.21 optional) asynchronous, Frequency Shift Keying (FSK)

Error Control, Data Compression, Testing, and Dialing

This	Supports
ITU-T V.42	LAPM error control, 1200 bps and higher
MNP	Levels 2, 3 and 4 error control, level 5 data compression, 1200 bps and higher
HST	Asymmetrical mode, at 16.8/14.4/12 kbps; 9600/ 7200/4800 bps, 450/300 bps back channel
ITU-T V.42 *bis*	Data compression, 1200 bps and higher
ITU-T V.54	Digital and remote digital loopback testing
ITU-T V.25 *bis*	Dialing and answering method for automatic calling and/or answering equipment

Fax Specifications

Your Courier V.Everything provides Group III-compatibility when controlled by Class 1 or Class 2.0 fax software. In addition, your Courier V.Everything adheres to the following standards:

This	Supports
TIA/EIA-578	Service Class 1 Asynchronous Facsimile DCE Control Standard
TIA/EIA-592	Service Class 2.0 Asynchronous Facsimile DCE Control Standard
ITU-T V.17	14.4/12 kbps
ITU-T V.29	9600/7200 bps
ITU-T V.27 *ter*	4800/2400 bps
ITU-T V.21	300 bps

Additional Specifications

This feature	Supports
Supported serial port rates	230400, 115200, 57600, 38400, 19200, 9600, 4800, 2400, 1200, 300 bps
Adaptive Speed Leveling (ASL)	21600, 19200, 16800, 14400, 12000, 9600, 7200, 4800 bps
Serial port connector	DB-25
Serial interfaces	EIA RS-232, supports Macintosh serial ports
Communications channel	Full- or half-duplex on 2-wire phone lines; demand-driven high-speed turnaround in HST mode; symmetrical speeds in V.32 *bis*

<table>
<tr><th>This feature</th><th colspan="3">Supports</th></tr>
<tr><td>Data format</td><td colspan="3">Binary, serial; defaults to 8-bit word length, no parity, and 1 stop bit.</td></tr>
<tr><td></td><td>Word Length</td><td>Parity (1 Bit)</td><td>Stop Bits</td></tr>
<tr><td></td><td>7</td><td>Even, Odd,Mark, Space</td><td>1</td></tr>
<tr><td></td><td>7</td><td>None</td><td>2</td></tr>
<tr><td></td><td>8</td><td>None</td><td>1</td></tr>
<tr><td>Flow control buffers</td><td colspan="3">Variable sizes</td></tr>
<tr><td>Command buffer</td><td colspan="3">56 characters, excluding the AT prefix, Carriage Return and spaces</td></tr>
<tr><td>Test options</td><td colspan="3">Remote digital loopback, digital loopback, test pattern, and dial test</td></tr>
<tr><td>Failed call timeout</td><td colspan="3">60-sec default, programmable 2-255 sec</td></tr>
<tr><td>Answer tone timeout</td><td colspan="3">60 sec</td></tr>
<tr><td>Answer tone detector</td><td colspan="3">2080-2120 Hz</td></tr>
<tr><td>Loss of carrier (Disconnect Timer)</td><td colspan="3">0.7 second default, programmable 0.2-25.5 sec</td></tr>
<tr><td>Equalization</td><td colspan="3">Adaptive</td></tr>
<tr><td>Receive sensitivity</td><td colspan="3">- 43 dBm ± 2 dBm</td></tr>
<tr><td>Transmit level</td><td colspan="3">- 9 dBm maximum</td></tr>
<tr><td>Transmitter frequency tolerance</td><td colspan="3">.01%</td></tr>
<tr><td>Certification</td><td colspan="3">FCC Part 15, Class B Domestic; IC (Canada) CS-03, UL listed</td></tr>
<tr><td>Ringer equivalence</td><td colspan="3">0.4 b</td></tr>
</table>

Serial Ports

Most computers provide a DB-25 or DB-9 port that conforms to the EIA-232 standard. If you are connecting your Courier V.Everything to a Macintosh computer, see the section *For Macintosh Computers*.

The EIA-232 Interface

The Courier V.Everything's serial port is factory set to signal according to the EIA-232 standard:

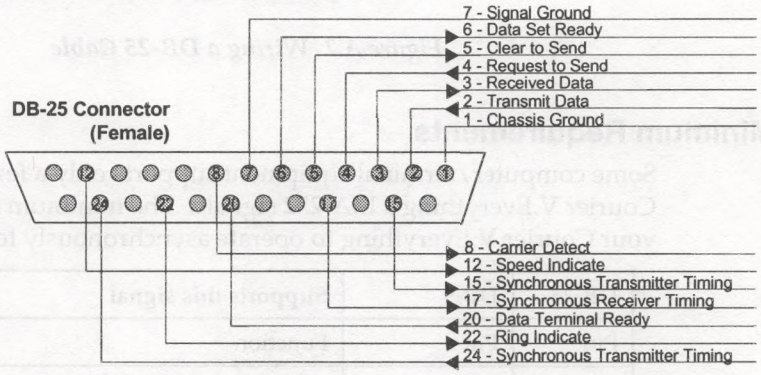

7 - Signal Ground
6 - Data Set Ready
5 - Clear to Send
4 - Request to Send
3 - Received Data
2 - Transmit Data
1 - Chassis Ground
DB-25 Connector
(Female)
8 - Carrier Detect
12 - Speed Indicate
15 - Synchronous Transmitter Timing
17 - Synchronous Receiver Timing
20 - Data Terminal Ready
22 - Ring Indicate
24 - Synchronous Transmitter Timing

Figure A.1 Signals at your Courier's Serial Port.

Wiring a DB-25 to DB-9 Cable

DB-9 connectors for PCs should be wired at the computer end of the cable as shown below.

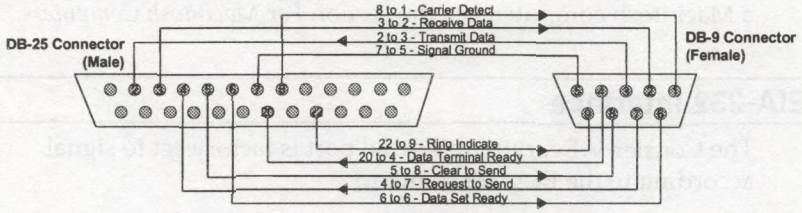

8 to 1 - Carrier Detect
3 to 2 - Receive Data
2 to 3 - Transmit Data
7 to 5 - Signal Ground
DB-25 Connector (Male)
DB-9 Connector (Female)
22 to 9 - Ring Indicate
20 to 4 - Data Terminal Ready
5 to 8 - Clear to Send
4 to 7 - Request to Send
6 to 6 - Data Set Ready

Figure A.2 Wiring a DB-25 Cable

Minimum Requirements

Some computer/terminal equipment supports only a few of your Courier V.Everything's EIA-232 signals. The minimum required for your Courier V.Everything to operate asynchronously follows:

DB-25	DB-9	Supports this signal
Pin	Pin	Function
2	3	Transmitted Data
3	2	Received Data
7	5	Signal Ground
20	4	Data Terminal Ready

Flow Control Requirements

If your computer and software support Clear to Send and you wish to use Transmit Data hardware flow control (&H1), Pin 5 (DB-25) or Pin 8 (DB-9) is required.

If your computer and software support Request to Send and you wish to use Received Data hardware flow control (&R2), Pin 4 (DB-25) or Pin 7 (DB-9) is required.

For Macintosh Computers

If you're connecting your Courier V.Everything to a Macintosh computer, we strongly recommend that you purchase a hardware handshaking cable to get the most reliable performance.

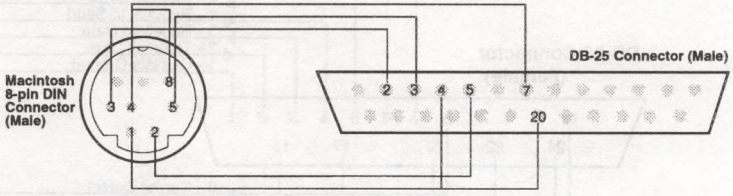


Figure A.3 Macintosh Computer Cable Pinout

Mac Pin	Mac Pin Description	Mode m Pin	Modem Pin Description
1	Output Handshake	4, 20	Request-to-Send and Data Terminal Ready
2	Input Handshake	5	Clear-to-Send
3	Transmit Data -	2	Transmit Data
4	Ground	7	Ground
4, 8	Ground to Received Data		
5	Received Data -	3	Received Data

Serial Ports (Macintosh Courier)

These are the signals generated or accepted by your Courier's serial port:

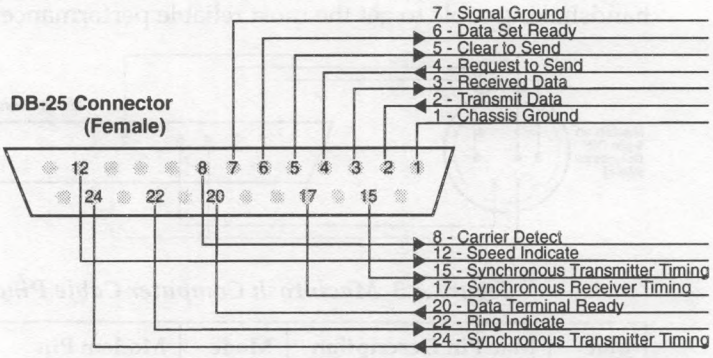


Figure A.4 Pinouts for your Courier's Serial Port

Appendix B
Warranty

U.S. Robotics Access Corp. Limited Warranty

Terms of the Limited Warranty

Your U.S. Robotics® product is covered by a Limited Warranty.
U.S. Robotics warrants that the product that you have purchased from U.S. Robotics or from a U.S. Robotics authorized reseller is free from defects in materials or workmanship during the Limited Warranty period, identified in the chart below, which is effective on the date of purchase.

During the Limited Warranty period, U.S. Robotics will repair or replace the product with the same or a similar model, which may be a remanufactured unit, at U.S. Robotics option, without charge for either parts or labor. Replacement parts assume the remaining warranty of the parts they replace. This Limited Warranty extends only to the original purchaser and is non-transferable.

The chart below identifies the terms of the factory repair/replacement warranty, as well as software/firmware updates and telephone support services included with the U.S. Robotics Limited Warranty.

	Free Telephone Support	**Free Software/ Firmware Updates**	**Hardware Support**
LANLinker Product Family	For 90 days, effective upon purchase	For 90 days, effective upon purchase	1 year Factory Repair/ Replacement
***Total Control* Product Family**	For 90 days, effective upon purchase	For 90 days, effective upon purchase	2 years Factory Repair/ Replacement
***TOTALswitch* Product Family**	For 90 days, effective upon purchase	For 90 days, effective upon purchase	3 years Factory Repair/ Replacement
Allegra*, Modem Pool and NETServer Product Families	For 90 days, effective upon purchase	For 90 days, effective upon purchase	2 years Factory Repair/ Replacement
***Allegra*, Courier and DataBurst* Product Families**	For 90 days, effective upon purchase	For 90 days, effective upon purchase	5 years Factory Repair/ Replacement

* The Allegra T1 for Windows NT®, Allegra T1 for NetWare®, Allegra PRI for Windows NT and Allegra PRI for NetWare are covered under a 2-year warranty. All other Allegra products carry a 5-year warranty.

What Is NOT Covered By the Limited Warranty

Items not covered by the Limited Warranty include, but are not limited to, the following:

- Product installation support
- A product purchased from anyone other than U.S. Robotics or a U.S. Robotics authorized reseller
- Routine cleaning, or normal cosmetic and mechanical wear
- A product that is modified, tampered with, misused or subjected to abnormal working conditions, including, but not limited to, lightning and water damage
- Damage from repair or replacement of warranteed parts by anyone other than U.S. Robotics or a U.S. Robotics authorized service provider

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Jurisdiction Laws

This Limited Warranty gives you specific legal rights. You may have others, which vary from jurisdiction to jurisdiction. Some jurisdictions do not allow limitations on duration of an implied warranty, or the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitation may not apply to you.

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How To Access Your Warranty Services

Telephone Support

Warranty

For 90 days, effective upon product purchase, you will have access to our technical support analysts. To obtain telephone support under the conditions of this Limited Warranty, call the appropriate U.S. Robotics number.

North America

1-800-231-8770 (toll free)
Monday - Friday
7. a.m. - 8 p.m.
Central Standard Time

Europe, Middle East, Africa

353-1-205-7700
Monday - Friday
9 a.m. - 7 p.m
Central European Time

All Other Locations

1-847-797-6600
Monday - Friday
7 a.m. - 8 p.m.
Central Standard Time

What Information Should I Have Ready Before Calling For Support?

To enable U.S. Robotics to respond to your inquiry as efficiently and effectively as possible, please have available as much of the following general and product-specific information as possible before calling for support.

General Information

√ Serial number and part number
(both are contained within the barcode affixed to the unit)
√ Product model name and number
√ Detailed, specific questions

Product-Specific Information

√ Applicable error messages
√ Add-on boards or hardware
√ Third-party hardware or software
√ Operating system type and revision level

Telephone Support Options

Customers who require telephone support beyond 90 days from the purchase date will be referred to a U.S. Robotics sales representative to establish a service contract, if desired.

Software/Firmware Updates

Warranty

For 90 days, effective upon product purchase, you will have access to U.S. Robotics' Systems Software/Firmware Updates from the U.S. Robotics' Network Systems Division web site: ***http://totalservice.usr.com***

Software/Firmware Update Options

Customers who require Software/Firmware updates beyond 90 days from the purchase date will be referred to a U.S. Robotics sales representative to establish a service contract, if desired.

Hardware Support

Warranty

During the applicable Limited Warranty period, if U.S. Robotics determines your product requires servicing, you will be given a Service Repair Order (SRO) number to help us track your Limited Warranty request. Once you have received your SRO number, mail the product, postage prepaid and insured, to the below-listed shipping address. Please make sure your SRO number is clearly visible on the outside of the package and be sure to pack your unit securely.

Call the appropriate U.S. Robotics number, listed below, for Hardware Support of your product.

North America

1-800-231-8770 (toll free)
Monday - Friday
7. a.m. - 8 p.m.
Central Standard Time

Europe, Middle East, Africa

353-1-205-7700
Monday - Friday
9 a.m. - 7 p.m
Central European Time

All Other Locations

1-847-797-6600
Monday - Friday
7 a.m. - 8 p.m.
Central Standard Time

Shipping Checklist - Did You Include:

√ Your Name
√ Your Company's Name
√ Return Shipping Address
√ A Contact Telephone Number
√ Serial Number and Part Number (both are contained within the barcode attached to the unit)
√ Brief Problem Description

Shipping Address

North America and Locations Outside of Europe, Middle East, Africa
U.S. Robotics
ATTN: SRO Receiving
1800 W. Central Rd.
Mt. Prospect, IL 60056-2293

Europe, Middle East, Africa
U.S. Robotics Services, Ltd.
ATTN: RMA Department
5 Richview Office Park
Clonskeagh, Dublin 14
SRO#Ireland

Hardware Support Options

Customers who require out-of-warranty hardware support will be referred to a U.S. Robotics sales representative to establish a service contract, if desired.

Notices

FCC Registration

FCC15: CJE-0263
FCC 68: CJEUSA-73130-FA-E

Connecting to the Telephone Company's Lines

The telephone company may request the telephone number(s) to which your Courier is connected and the FCC information printed above.

If your Courier is malfunctioning, it may affect the telephone lines. In this case, disconnect your Courier until the source of the difficulty is traced.

FCC Notice: Radio and Television Interference

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference does not occur in a particular installation. If this equipment does cause harmful

interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

IC (Industry Canada)

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the radio interference regulations of Industry Canada (formerly Canadian Department of Communications).

Le présent appareil numérique n'émet pas de bruits radio-électriques dépassant les limites applicables aux appareils numériques de la classe B prescrites dans le Règlement sur le brouillage radioélectrique édicté par Industrie Canada (antérieurement le ministère des Communications du Canada).

The Industry Canada (formerly DOC) label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational, and safety requirements. The department does not guarantee the equipment will operate to a user's satisfaction.

Before installing this equipment, make sure you are permitted to connect it to the facilities of the local telecommunications company. You must also install the equipment using an acceptable method of connection. In some cases, you may also extend the company's inside wiring for single line individual service by means of a certified connector assembly (telephone extension cord). You should be aware, however, that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by a user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

For your own protection, make sure that the electrical ground connections of the power utility, telephone lines, and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Warning: Do not attempt to make such connections yourself; contact the appropriate electric inspection authority or electrician.

UL Listed Accessory

Your internal Courier modem is a UL listed accessory. It must be used with a UL listed computer.

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